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Conference name: Second International Workshop on Multiangular Measurements and Models (IWMMM-2)  
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Title: Calibration of multi-angle flight sensors  
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The calibration of the Multi-angle SpectroRadiometer and its aircraft companion, AirMISR, will be maintained by multiple methodologies. For MISR, an on-board calibrator (OBC) consists of a solar illuminated diffuse panel, along with detector standards. To reduce the possibility of a systematic bias in the radiometric calibration, the vicarious calibration of the instrument will also be conducted. Here a suite of ground instruments will characterize the surface BRF, and atmospheric measurements will be made in order to determine aerosol abundance and optical properties. These data are used to predict the top-of-atmosphere radiance, and thereby provide for a calibration of the MISR sensor. Additionally, the camera-to-camera relative calibration of MISR is more reliably made with an underflight of AirMISR. This paper will summarize results of our AirMISR vicarious calibration campaigns over Moffett field and Rogers Day Lake, as well as provide our estimates of the accuracy of this type of calibration for the MISR experiment.